State of Alaska
FY2008 Governor's Operating Budget

Department of Environmental Conservation
Drinking Water
Component Budget Summary

Component: Drinking Water

Contribution to Department's Mission

Verify safe drinking water.

Core Services

- Maintain state primacy for regulating public drinking water systems.
- Enforce public water system (PWS) monitoring requirements for drinking water contaminants.
- Review construction, installation, and operation plans for PWS to protect public health.
- Assist PWS owners in identifying the sources of their drinking water and help them develop strategies to effectively protect those sources from contamination.
- Provide technical and compliance assistance to PWS owners and operators, and the public.

End Results	Strategies to Achieve Results
A: Drinking water is safe. Target #1: Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt. Measure #1: Change in the % of plans that can be approved within 30 days from initial receipt. Target #2: 100% of the population served by public water systems (PWS) in compliance with health-based standards. Measure #2: % of the population served by public water systems (PWS) in compliance with health-based standards.	**A1: Timely review of all complete drinking water engineering plans submitted.** Target #1: Review all complete submissions of drinking water engineering plans within a 30 day time frame. Measure #1: % of all complete plans reviewed within 30 days of receipt. **A2: Implement sanitary survey requirements for all federally regulated public water systems.** Target #1: 100% of public water systems file required sanitary surveys according to schedule. Measure #1: % of public water systems in compliance with their sanitary survey schedule. **A3: Train and certify third party sanitary survey inspectors.** Target #1: 100% of the sanitary survey inspectors are trained and certified. Measure #1: % of the sanitary survey inspectors trained and certified.

Major Activities to Advance Strategies

- Conduct reviews for construction, operation, and separation distance waivers.
- Review reports provided to consumers by PWS about sampling results.
- Process variances and exemptions to reduce the number of PWS significantly out of compliance.
- Respond to PWS noncompliance with enforcement actions and make referrals to EPA when appropriate.
- Help PWS owners prepare Emergency Response
- Conduct sanitary surveys of PWS and certify third party sanitary survey inspectors.
- Adopt and implement federal drinking water rules.
- Submit timely primacy applications to EPA for all federal rules adopted.
- Provide technical assistance about wellhead protection to communities.
- Review PWS sampling, monitoring, and reporting activities for all regulated drinking water contaminants.

Major Activities to Advance Strategies

Plans and perform security audits on their water systems.

FY2008 Resources Allocated to Achieve Results

FY2008 Component Budget: $5,653,500

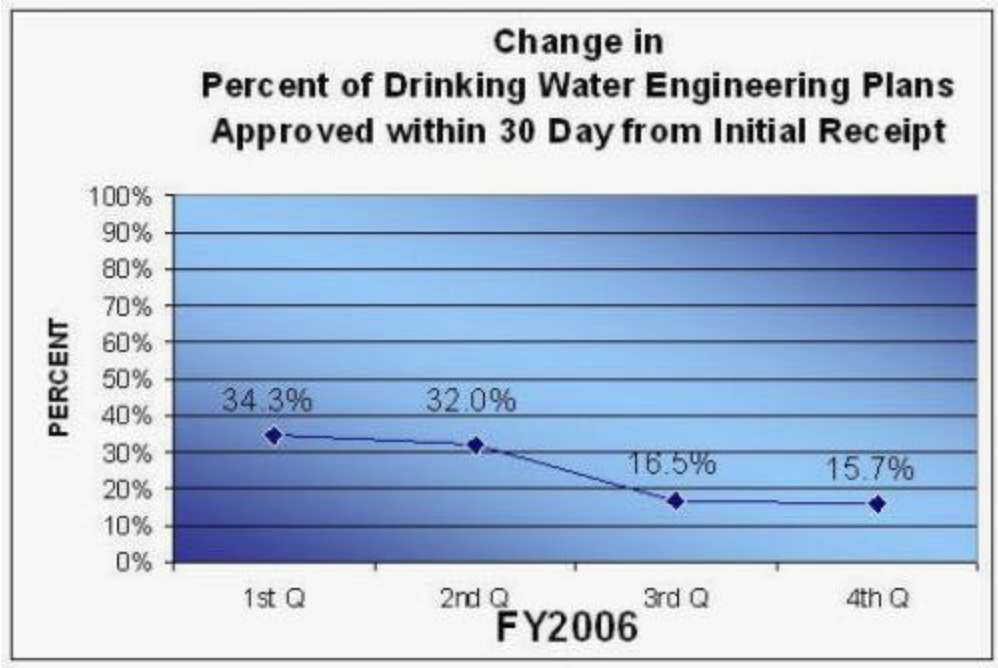
Personnel:	
Full time	53
Part time	0
Total	53

Performance Measure Detail

A: Result - Drinking water is safe.

Target #1: Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.

Measure #1: Change in the % of plans that can be approved within 30 days from initial receipt.



Analysis of results and challenges: To provide for the protection of public health, Drinking Water regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified, engineering plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet the criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public heath and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineering plan submittals within 30 days of receipt.

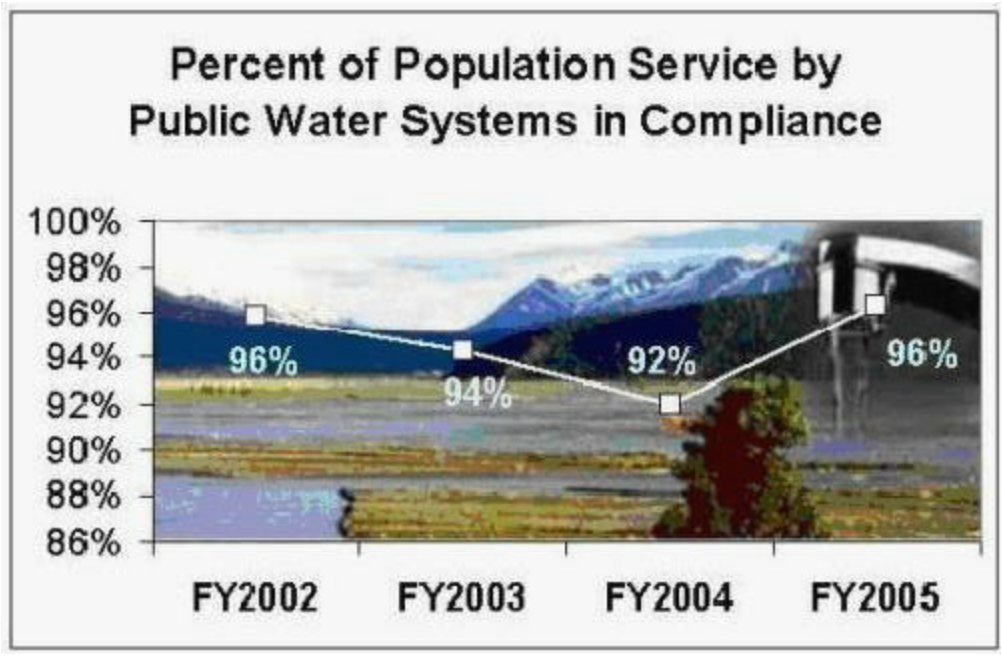
Most public water systems by design are complex, with many individual components, including the treatment plant and distribution system that must be reviewed and approved by DEC. Due to the complexity of the

systems and the importance of protecting people from waterborne disease, the engineering plan review process is also complex. Many engineering plan submittals do not contain required information, needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the review process timeline. ADEC anticipates conducting an Advanced Sanitary Survey class and other outreach sessions on new and upcoming rule implementation, as well as implementation of new engineered plan submittal checklists to assist in reducing the time necessary for clarification and technical assistance.

This measure will fluctuate with unplanned vacancies and/or implementation of new complex federal rules requiring equally complex changes to the public drinking water systems. During the reporting period there was a decrease in the number of plans reviewed within 30 days of initial receipt because of: 1) An increase in the number of public water system plans received; 2) An increase in complexity of public water system plans received, which can be attributed to the new Long Term 1 Enhanced Surface Water Treatment and Stage 1 Disinfectants/Disinfection byproducts Rules; and, 3) Vacancies and recently hired new and inexperienced engineering staff.

Target #2: 100% of the population served by public water systems (PWS) in compliance with health-based standards.

Measure #2: % of the population served by public water systems (PWS) in compliance with health-based standards.



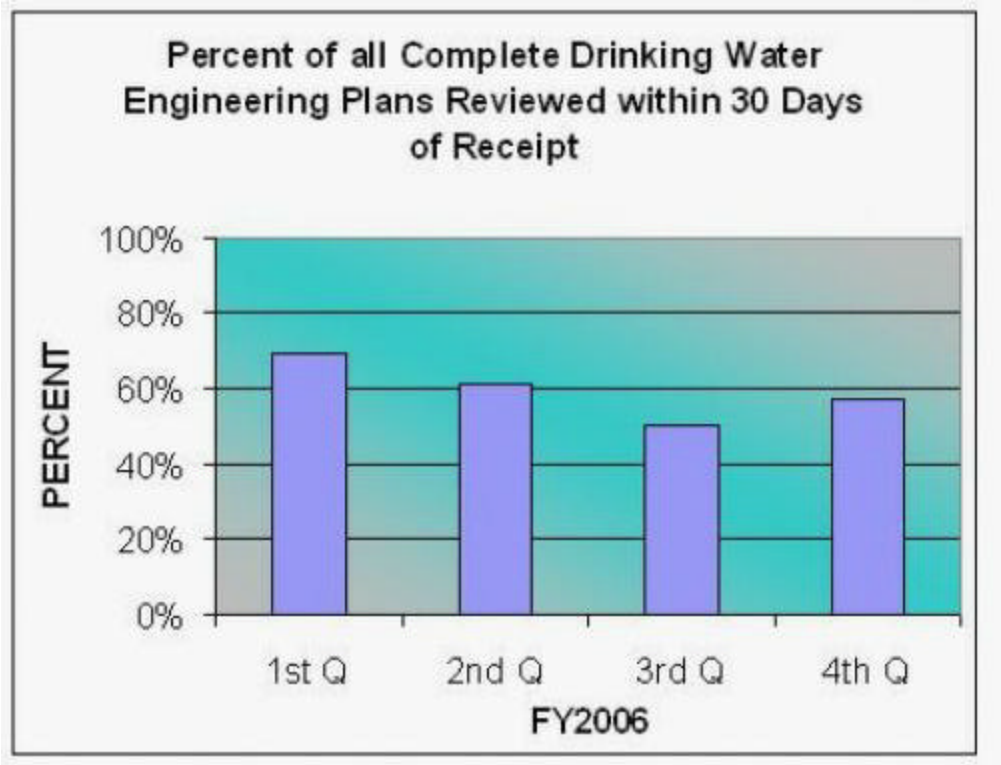
Analysis of results and challenges: To address the threat of waterborne disease and provide for the protection of public health, the State of Alaska has adopted the Safe Drinking Water Act (SDWA) requirements and the Drinking Water Program is responsible for the implementation of the SDWA within the State. All federally regulated public water systems are required to be in compliance with the SDWA. Various health-based standards contained within the SDWA are designed to protect people from consuming unsafe drinking water. Health-based standards are EPA established limits for many chemical and radiological contaminants, called Maximum Contaminant Levels (MCL's), as well as, microbiological contaminants. The MCL is an enforceable standard that all public water systems must meet in order to serve drinking water to the public. There are also various Treatment Technique criteria that public water systems must meet. Treatment Techniques have to do with the way water is treated to make it potable and safe for human consumption. All of these criteria make up the health-based standards.

This information is compiled and distributed by EPA. The reporting frequency has been reduced to annual fiscal year basis. Data for the prior year is not available until October or November of each year. The last information reported from EPA was in the fourth quarter of FY2005, which was 96% of the population of Alaska was served by public water systems that meet all health based standards.

While a 96% compliance rate with health based standards is excellent, it does fall below our goal of having 100% of the population being served by public water systems in compliance with all of the health-based standards. The Drinking Water Program continues to meet this challenge in several different ways. We continue to offer compliance and technical assistance to all public water system operators and owners to help them to remain in compliance with all of the health-based standards that apply to their systems. The drinking water program also has various enforcement strategies in place to require that public water systems remain in compliance with the health-based standards. This two-pronged approach to compliance assistance and enforcement allows us to ensure that as many people as possible are being served with safe drinking water.

A1: Strategy - Timely review of all complete drinking water engineering plans submitted.

Target #1: Review all complete submissions of drinking water engineering plans within a 30 day time frame.
Measure #1: % of all complete plans reviewed within 30 days of receipt.



Analysis of results and challenges: Waterborne disease continues to be a threat to public health in many areas. To provide for the protection of public health, the Drinking Water Regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified that engineering plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineering plan submittals within 30 days of receipt.

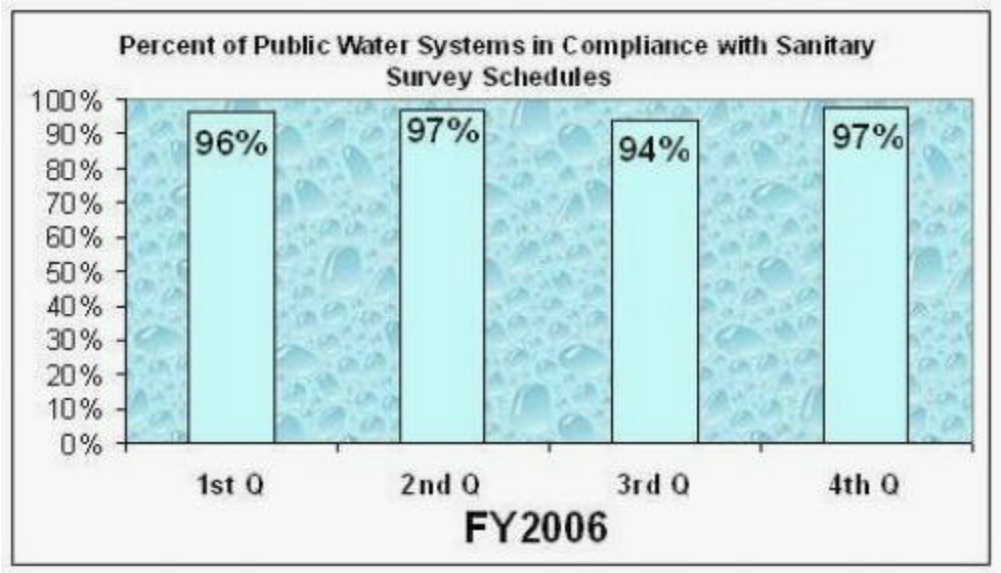
Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineering plan review process is also complex. Many engineering plan submittals do not contain required information, needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the review process timeline. ADEC anticipates conducting an Advanced Sanitary Survey class and other outreach sessions on new and upcoming rule implementation, as well as implementation of new engineered plan submittal checklists to assist in reducing the time necessary for clarification and technical assistance.

This measure will fluctuate with unplanned vacancies and/or implementation of new complex federal rules

requiring equally complex changes to the public drinking water systems. During the reporting period there was a decrease in the number of plans reviewed within 30 days of initial receipt because of: 1) An increase in the number of public water system plans received; 2) An increase in complexity of public water system plans received, which can be attributed to the new Long Term 1 Enhanced Surface Water Treatment and Stage 1 Disinfectants/Disinfection byproducts Rules; and, 3) Vacancies and recently hired new and inexperienced engineering staff.

A2: Strategy - Implement sanitary survey requirements for all federally regulated public water systems.

Target #1:100% of public water systems file required sanitary surveys according to schedule.
Measure #1: % of public water systems in compliance with their sanitary survey schedule.



Analysis of results and challenges: As part of the 1986 Amendments to the Safe Drinking Water Act, the EPA promulgated the Total Coliform Rule (TCR) which was adopted by the State in 1993. The TCR is the primary health-based regulation used to require all public water systems to routinely monitor for bacteriological contamination in the drinking water they serve to the public. Since most waterborne disease outbreaks are caused by bacteria or other microorganisms, routinely testing for bacteriological contaminants is one of the best ways we have of making sure that drinking water is safe to drink. Another very important part of the TCR is the requirement that all federally regulated public water systems have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and the operations and maintenance procedures of a public water system. The sanitary survey process is used to evaluate the adequacy of a system and helps to determine if they are producing and distributing safe drinking water. Systems using groundwater as a source are required to have a sanitary survey every five years. Systems using surface water as a source are required to have a sanitary survey every three years.

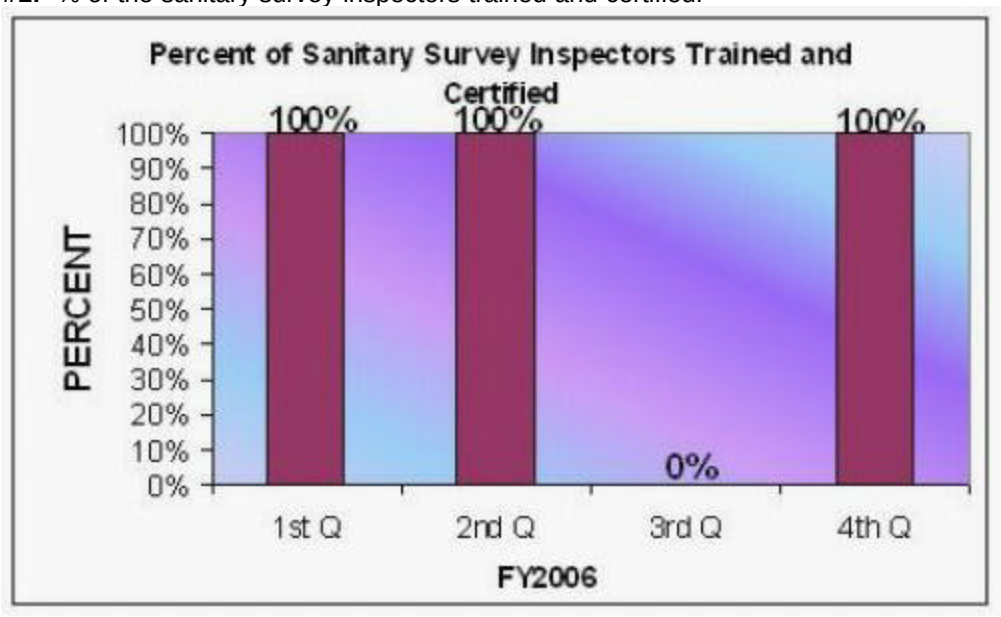
In the fourth quarter of FY2006 a total of 1,545 public water systems had a sanitary survey scheduled requirement. Of that total, 1,504 public water systems had their scheduled sanitary survey completed. This number reflects a 97% compliance rate with the sanitary survey requirement for FY2006.

While a 97% compliance rate with the sanitary survey scheduled requirement is good, it does fall below the target rate of 100% of the population being served by a public water system in compliance with health-based standards. Since the sanitary survey scheduled requirement is one of the most important health-based standards, conducting timely sanitary surveys is one of the priority goals of the Drinking Water Program. Some of the challenges we face in meeting this goal are; remote location and difficulty getting to some of the public water systems, cost to the system of conducting the sanitary survey, and the lack of sufficient and timely enforcement actions to establish/confirm the high priority of sanitary surveys. The Drinking Water Program continues to address these challenges by having the Program's Environmental Specialists and Environmental

Engineers trained and certified, as well as ADEC-approved third party sanitary survey inspectors to conduct sanitary surveys and by scheduling and conducting sanitary survey inspections for public water systems.

A3: Strategy - Train and certify third party sanitary survey inspectors.

Target #1:100% of the sanitary survey inspectors are trained and certified.
Measure #1: % of the sanitary survey inspectors trained and certified.



Analysis of results and challenges: All federally regulated public water systems are required to have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if they can produce and distribute safe drinking water. Sanitary surveys are required every five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health requires that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training. There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be conducted by department staff, so the Drinking Water Program has contracted with the University of Alaska Southeast, the Alaska Training/Technical Assistance Center (ATTAC) to provide training sessions for both department staff and other third party individuals who have prior experience with public water system treatment and distribution process. ATTAC currently offers at least three training sessions per year, which includes two Basic Sanitary Survey classes and one Advanced Sanitary Survey class. The Drinking Water Program also plans to offer one Advanced Sanitary Survey class annually.

The data for the 1st, 2nd, and 4th quarters of FY2006 shows that we have met our goal of 100% certification of food handlers and sanitary survey inspectors, however the 3rd quarter shows a 0%. This was due to having zero food handlers and sanitary inspectors being certified.

Key Component Challenges

Meeting the requirements of the Safe Drinking Water Act Amendments of 1996 continues to be a challenge for the Drinking Water (DW) Program. The challenges will continue as new requirements are adopted over the next couple of years. These new requirements establish significant expectations and new deadlines for compliance that will be difficult for PWS to meet. The new requirements are complex and require more DEC involvement to help PWS comply in order to provide safe drinking water.

In FY2007, DEC is implementing the Arsenic Rule which will impact approximately 80 PWS by requiring them to remove much more Arsenic from drinking water than previously required. Additional rules to be implemented in FY2007 include; the Radionuclide Rule, the Variances and Exemptions Rule (which will allow DEC to offer flexibility to PWS unable to comply with certain requirements), the Filter Backwash and Recycling Rule, and the Long Term 1 Enhanced Surface Water Treatment Rule, which will impact approximately 290 PWS by requiring them to control *Cryptosporidium* (a parasitic protozoan) and other pathogenic organisms not previously required.

Also in FY2007, DEC will begin preparation for adopting the Groundwater Rule which is scheduled to be finalized by EPA on October 11, 2006. The Groundwater Rule will have the potential to impact over 1200 Alaska public water systems, approximately 83% of the water systems in the state. Protecting ground water, used as a source of drinking water by public water systems, from contamination is becoming more difficult. As residential populations grow and increased industrial and agricultural development occurs, demand for ground water increases. Competing needs of sustained economic development and public health protection will require clarity in the development of regional resource management plans. Industrial and economic enhancement activities such as precious metals mining, gas or oil pipeline expansion projects, forestry, subdivision development, and sand and gravel pit mining, will continue to require effective long term planning and timely follow-up with enforcement for noncompliance, to achieve long-term protection of drinking water resources.

Significant Changes in Results to be Delivered in FY2008

The Alaska Drinking Water Program is an EPA delegated primacy program, receiving a federal grant as the primary source of funding. For the past several years, grant funding has not kept pace with increasing costs required to implement the program. The program has fallen behind in adopting and implementing new federal rules. When a program falls behind, the EPA retains partial primacy and enforces the new rules until the State can catch up. Traditionally, EPA enforcement is swift, strict and does not include technical assistance - making it difficult for public drinking water systems to attain and maintain compliance. If the State does not catch up, primacy may be lost altogether.

Funding for additional staff and resources is needed to keep pace with new requirements, adopting and implementing new rules in a timely manner. Additional federal funds requiring a 50% match are available.

The 2007 legislature proposed a three year plan for obtaining and implementing primacy and funded the first year to ensure that Alaska's public water systems will be regulated by the state Drinking Water Program not the EPA. A transaction in this component's budget seeks funding for the second year of that three year plan.

In addition to providing needed technical support, State primacy allows:

1. Issuance of monitoring waivers to reduce the cost of routine monitoring. EPA does not.
2. Issuance of variances or exemptions that allow public drinking water systems to achieve compliance over time while still providing public health protection. EPA does not.
3. Issuance of construction and operation approvals that reflect local knowledge, experience and an understanding of arctic engineering principles. Experience EPA does not have.

Major Component Accomplishments in 2006

Coordinated the completion of training of 8 Sanitary Survey Inspector workshops for the certification of both Drinking Water Program staff and Third Party Sanitary Survey Inspectors to complete sanitary surveys of Alaska public water systems. Seven Advanced (2-day) training workshops were taught in Anchorage (3), Fairbanks (1), Juneau (1) Soldotna (1), and Wasilla (1); and 1 Basic (5-day) training workshop was also taught in Anchorage. The workshops focused on the new sanitary survey inspector regulatory requirements and use of the new electronic enhanced sanitary survey form.

Completed the adoption of regulations to implement the Arsenic Rule, Radionuclides Rule, Public Notification Rule, Variances and Exemptions Rule, Filter Backwash and Recycling Rule, and new Analytical Methods.

Began the public review process for the adoption of regulations to implement the Long Term 1 Enhanced Surface Water Treatment Rule.

Coordinated and facilitated 5 Alaska public water systems Technical Assistance Providers meetings in Anchorage from

January 27, 2006 – June 29, 2006. The primary Alaska public water system Technical Assistance providers include the Alaska Rural Water Association, Alaska Native Tribal Health Consortium, Alaska Training and Technical Assistance Center, Rural Utility Business Advisors, Remote Maintenance Workers, and the Alaska Rural Community Assistance Corporation.

Completed a joint EPA /ADEC Arsenic Treatment Technology workshop in Anchorage, September 13 – 14, 2005, to better assist Alaska public water systems, Technical Assistance Providers, and consulting engineers in understanding the Arsenic Rule. Ninety two (92) participants registered for this workshop.

Completed comprehensive performance evaluation (CPE) workshops of the PWS for the City of Haines (October 2005) and the City of Craig (April 2006).

Statutory and Regulatory Authority

AS 44.46.020, AS 44.46.025, AS 46.03.020, AS 46.03.024, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.090, AS 46.03.100, AS 46.03.710, AS 46.03.720, AS 46.03.761, AS 46.03.900, 18 AAC 15, 18 AAC 72, 18 AAC 80

Contact Information

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Drinking Water
Component Financial Summary

All dollars shown in thousands

	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	2,829.5	3,617.9	4,476.0
72000 Travel	91.5	147.7	212.7
73000 Services	331.3	620.5	787.2
74000 Commodities	71.5	137.6	157.6
75000 Capital Outlay	38.1	20.0	20.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	**3,361.9**	**4,543.7**	**5,653.5**
Funding Sources:			
1002 Federal Receipts	2,578.6	3,411.7	3,714.6
1003 General Fund Match	564.0	930.6	1,339.3
1004 General Fund Receipts	0.0	0.0	379.1
1005 General Fund/Program Receipts	160.7	201.4	220.5
1007 Inter-Agency Receipts	16.1	0.0	0.0
1061 Capital Improvement Project Receipts	42.5	0.0	0.0
Funding Totals	**3,361.9**	**4,543.7**	**5,653.5**

Estimated Revenue Collections

Description	Master Revenue Account	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		**0.0**	**0.0**	**0.0**
Restricted Revenues				
Federal Receipts	51010	2,578.6	3,411.7	3,714.6
Interagency Receipts	51015	16.1	0.0	0.0
General Fund Program Receipts	51060	160.7	201.4	220.5
Capital Improvement Project Receipts	51200	42.5	0.0	0.0
Restricted Total		**2,797.9**	**3,613.1**	**3,935.1**
Total Estimated Revenues		**2,797.9**	**3,613.1**	**3,935.1**

Summary of Component Budget Changes
From FY2007 Management Plan to FY2008 Governor

All dollars shown in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2007 Management Plan	**1,132.0**	**3,411.7**	**0.0**	**4,543.7**
Adjustments which will continue current level of service:				
-Fund Source Adjustment for Retirement Systems Increases	379.1	-379.1	0.0	0.0
Proposed budget increases:				
-Obtain and Implement Primacy for New Public Drinking Water System Federal Rules	303.0	302.9	0.0	605.9
-FY 08 Retirement Systems Rate Increases	124.8	379.1	0.0	503.9
FY2008 Governor	**1,938.9**	**3,714.6**	**0.0**	**5,653.5**

Drinking Water
Personal Services Information

Authorized Positions			Personal Services Costs	
	FY2007 Management Plan	FY2008 Governor		
Full-time	48	53	Annual Salaries	2,689,071
Part-time	0	0	Premium Pay	0
Nonpermanent	0	0	Annual Benefits	2,080,360
			Less 6.15% Vacancy Factor	(293,431)
			Lump Sum Premium Pay	0
Totals	**48**	**53**	**Total Personal Services**	**4,476,000**

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Assistant	1	0	0	0	1
Administrative Clerk II	1	0	0	0	1
Administrative Clerk III	3	2	0	0	5
Analyst/Programmer I	1	0	0	0	1
Analyst/Programmer IV	1	0	0	0	1
Env Eng Associate	1	1	0	0	2
Environ Eng Asst I	2	1	0	2	5
Environ Eng Asst II	0	0	0	1	1
Environ Engineer I	1	1	1	1	4
Environ Engineer II	1	0	0	0	1
Environ Program Manager I	2	1	0	2	5
Environ Program Manager II	0	1	0	0	1
Environ Program Manager III	1	0	0	0	1
Environ Program Spec I	3	1	0	0	4
Environ Program Spec II	3	1	0	2	6
Environ Program Spec III	4	1	1	1	7
Environ Program Technician	1	0	1	2	4
Hydrologist I	1	0	0	0	1
Regulations Spec I	1	0	0	0	1
Regulations Spec II	1	0	0	0	1
Totals	**29**	**10**	**3**	**11**	**53**